

MUSEUM MANNERS: THE SENSORY LIFE OF THE EARLY MUSEUM

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In *The Boy Who Breathed on the Glass in the British Museum* H.M. Bateman depicts the story of a boy who is arrested for breathing on one of the display cases in the British Museum.¹ While purely fictional, this picture book highlights the popular notion of the museum as inviolable and untouchable, a site of pristine preservation where even a breath might have damaging effects. Many contemporary museums are challenging the traditional 'hands off' ethos of the museum with innovative, interactive exhibitions. (A recent example is the 'Touch Me' exhibit at the Victoria & Albert Museum in London.)² Yet such exhibitions are still exceptions to the rule of sensory restraint which is generally expected to govern the behavior of museum visitors. Artefacts for the most part are only to be seen, not felt, smelt, sounded and certainly not tasted. How intrinsic, however, is this rule of sensory restraint to the museum? How did visitors to the first museums behave? What were their sensory expectations and experiences?³

One of the most difficult subjects for an historian to investigate is that of the corporeal practices of earlier eras. Ways of walking, eating, smelling and touching, while laden with social significance, are often so taken for granted that they are little commented on by their practitioners. It takes a very thorough observer to record the ordinary bodily motions of daily life. Often it is in the descriptions of travellers, who find local customs foreign and therefore worthy of note, that one comes across the best descriptions of the corporeal customs of past times. Thus from a Frenchman's account of his eighteenth-century visit to England we learn that in the House of Commons at that time the customary practice was for orators to stand "with their legs straddling, one knee somewhat bent, and one arm extended, as if they were going to fence."⁴ Another potential source of information is the reminiscences of individuals who have lived long enough to have seen the customs of their youth pass away and therefore make note of them as curiosities. From the recollections of the long-lived Mary Berry, for example, we learn that Horace Walpole walked on tiptoe according to the custom of elegant eighteenth-century gentlemen. Another source of information, and one which was richly mined by Norbert Elias in *The Civilizing Process*, is the etiquette guide. Such guides reveal both contemporary ideals of proper behavior among the classes to which they are addressed and certain common practices which were deemed to require correction. For example, the frequency with which readers of medieval instructions are advised to clean their hands before dipping them into the communal pot indicates that people frequently ate with unwashed hands.⁵

Just as it is often difficult to know what people of past eras did with their bodies, it is difficult to know what they did with the things around them. One cannot assume that the function of an object is evident in its design. For example, a chair is evidently designed for sitting on but this mere fact tells us nothing about

the social and symbolic function of chairs or about the other acts people may have performed with them. Simply looking at a nineteenth-century chair, for example, cannot tell us that a dutiful daughter in the eighteenth-century might curtsy to her father seated in that chair, and even to the empty chair when her father was absent.⁶ Similarly, in future centuries, no one would be able to tell by looking at a dinner table from our own era that, rather than being primarily used for dining, it was customarily employed as a place for storage and work.⁷

Scholars of material culture are increasingly investigating the social life of things, such as furniture or clothing, in order to uncover how objects matter to the constitution of the social world.⁸ This approach can fruitfully be extended to include the *sensory* life of things, or the ways in which objects are experienced and imbued with meaning through diverse sensory practices.⁹ The objects contained in museums, removed as they are from ordinary social use, may seem to be frozen in time and space. Yet they too have a social and sensory history which merits exploration. It is with this aim in mind that I investigate here the interaction of visitors and curators with collections from the mid-sixteenth hundreds to the end of the eighteenth century. While visual perception often played a dominant role in the sensory experiences of visitors to such collections, I am particularly interested in examining what else museum-goers may have done besides look.

The central site for this investigation is the Ashmolean Museum of Oxford, founded in 1683. This site is supplemented by other museums and collections in seventeenth and eighteenth century England.¹⁰ For the purpose of this study I have not distinguished between private collections frequented by the public, institutional collections and public collections—a problematic distinction in any case—as one finds similar visitor behaviour in all these sites.¹¹

As I have noted, information on bygone corporeal practices is often hard to come by. Yet from the references that do crop up in seventeenth and eighteenth century accounts of museum visits, it is evident that early museums were not exclusively hands-off affairs. Take, for example the following description by Celia Fiennes of a visit to the Ashmolean Museum in Oxford around 1694:

[T]here is a picture of a Gentleman that was a great benefactor to it being a cavalier, the frame of his picture is all wood carved very finely with all sorts of figures leaves birds beasts and flowers, he gave them a fine gold Meddals or silver gilt, with two fine great Chaines of the same, one was all curious hollow worke which were given to him by some prince beyond sea; there is a Cane which looks like a solid heavy thing but if you take it in your hands its as light as a feather, there is a dwarfe shoe and boote, there are several Loadstones and it is pretty to see how the steele clings or follows it, hold it on top att some distance the needles stands quite upright hold it on either side it moves towards it as it rises and falls.¹²

From this run-on description (which mimics the experience of rushing from one exhibit to another) we learn that at least certain exhibits in the museum were hands on. This is confirmed by a 1710 account of a visit to the Ashmolean by Zacharias Conrad von Uffenbach, a German traveller, who comments on certain tactile properties of the exhibits, finding the hair of a stuffed reindeer “almost as stif as horse-hair” while that of a Turkish goat is “as soft as silk.”¹³

Part of the attraction of museums and of the cabinets of curiosities which

preceded them, in fact, seemed to be their ability to offer visitors an intimate physical encounter with rare and curious objects. In certain cases the curious character of a museum piece may have resided in a quality imperceptible to the eye, such as in the case of the cane at the Ashmolean described by Fiennes “which looks like a solid heavy thing but if you take it in your hands its as light as a feather.” In these cases the non-visual senses might be seen as providing a necessary adjunct to the sense of sight. However, contemporary accounts indicate that even artefacts with no apparently distinctive non-visual qualities—including paintings—might be touched by visitors. The popular art critic, Anna Jameson, suggestively wrote in 1840 that everyone could remember the days when gallery-goers strutted about “touching the ornaments—and even the pictures!”¹⁴ While touching museum pieces was apparently once a common phenomenon, Jameson’s remark indicates that by the mid-nineteenth-century the practice was eliciting the same disapproval that the time-honoured custom of eating with one’s hands had begun to incur among the upper classes a couple of centuries earlier.

With regard to premodern customs such as eating with one’s hands, Norbert Elias argued that it is insufficient and, indeed, misleading, to characterize the corporeal practices of earlier eras as simply the result of a lack of discipline and education or “bad manners”. These practices must rather be explored, in Elias’s words, “as something that fitted the needs of these people and that seemed meaningful and necessary to them in exactly this form.”¹⁵ In terms of the visitors to early museums, how might their multisensory interactions with artefacts be understood as not simply a matter of “bad” or “childish” behaviour but something which was meaningful and necessary to them within the cultural context of their time?

Museums and galleries have always served a number of purposes other than the evident one of enabling visitors to appreciate their collections of art and artefacts. They are a site for social interaction and for acquiring and conveying an air of cultural authority. They may provide a cool place on a hot day or a quiet retreat. While modern gallery-goers often decry the amount of walking involved in seeing a museum, the first galleries in private houses were employed precisely for walking. Paintings were added to these galleries in order to give people something at which to look as they walked.¹⁶ Although it is the focus of this particular essay, the sensory history of the museum does not solely concern the interactions of visitors and curators with exhibits

Furthermore, in the seventeenth and eighteenth centuries, as today, museum visits were integrated with other activities. Celia Fiennes, for example, combined her visit to the Ashmolean with a tour of the Oxford Colleges. She found Magdalen College remarkable for its “very fine gravel walk [on which] two or 3 may walke abreast”, Corpus Christi College is noted for its “very good bread and beare” Trinity College Chapel is distinguished by its wainscoting in a “fine sweet wood . . . like cedar,” and St John’s offers the “great Curiosity much spoken of”: a portrait of Charles I in which “the whole lines of face hand and garment . . . is all written hand and contains the whole Common prayer.”¹⁷ Fiennes full-bodied approach to sight-seeing is especially notable during her visit to Oxford’s Physic Garden, which in some ways formed the botanical counterpart to the Ashmolean with its collection of rare and curious plants:

The Physick Garden afforded great diversion and pleasure, the variety of flowers and plants would have entertained one a week, the few remarkable things I took notice off was . . . the Sensible plant [Mimosa], take but a leafe between finger and thumb and squeeze it and it immediately curls up together as if pained, and after some tyme opens abroad again . . . there is also the Humble plant that grows on a long slender stalke and do but strike it, it falls flatt on the ground stalke and all, and after some tyme revives againe and stands up . . . there is the Wormwood sage . . . , a narrow long leafe full of ribbs, in your mouth the flavour is strong of Wormwood to the taste.¹⁸

From Fiennes' descriptions of these sites we can see that her museological investigations were of a piece with her observations elsewhere. There is no suggestion of the necessity of subduing one's senses within collection settings. The overall impression is of a lively exploration of whatever a particular site has to offer and the more interactive that happens to be the better.

Let us look then at the ways in which the senses might be engaged in the early museum. As regards the sense of touch, one key trait customarily associated with manual license is that of possession. One is free to touch what one owns. One may further extend this privilege to others, as a sign of favour. In the case of a private collection, hence, it was (and is) customary for collectors to handle their pieces and to allow favoured guests the same privilege. As the first museums open to the public had their origins in private collections, it could be expected that many of the customs of the latter would be continued in the former. For example, visitors to early museums were guided through the collection by a curator, just as guests might be guided through a private collection by a host. Allowing the visitors to touch the artefacts was an expected mark of courtesy on the part of the curator, who played the role of the host. This comes out clearly in an account from 1760 in which the underkeeper of the Ashmolean describes a museum visitor's insistence on manual access:

She desired me to take the Glass from off several of the Drawers, which I was somewhat unwilling to do, lest anything be lost by that means; which she perceiving she told me that I was not quite so civil as might be; that the last time she had seen the Museum . . . she had handled and examin'd the Curiosities in the Cabinet as long as she pleas'd.¹⁹

Contemporary notions of civility evidently included being allowed to handle museum pieces, even small items stored away in drawers. The appeal to civility carried enough weight that, in this case, the curator did grant the lady her wish and allowed her "to have some of them in her hand, that she might inspect them more narrowly."²⁰ The underkeeper further notes that while the lady was inspecting the objects in the drawer he was kept busy handing "Curiosities" to a gentleman visitor.

Handling is often associated with damage, and one wonders how early curators balanced the demands for tactile access with the requirements of conservation. In the public's mind—and in the mind of donors—the museum constituted a safe place for the preservation and display of rare objects. In actual fact, however, seventeenth- and eighteenth-century curators were often not assiduous conservers of their collections, even according to the primitive conservation practices of the day. It was noted of the Ashmolean in 1753, for example, that

the founding collection was “much the worse for wear, and even worse if possible by the conduct of some Keepers and their understrappers.” In 1780 a report proclaimed that: “Nothing can equal the negligence with which the Ashmolean Museum was kept.”²¹

Despite an often irreverent attitude towards the objects under their care, curators were not so unconcerned about the preservation of their collections that they had *no* reservations regarding the interaction of visitors with exhibits. Breakage was a major concern for collection keepers. The great seventeenth-century collector Cardinal Mazerin attempted to keep his collection intact without making it untouchable by delicately reminding guests that “these pieces break if they fall.”²² Undoubtedly museum visitors would have required many reminders of this sort as well, and even in early museums fragile objects would usually have been safeguarded in glass cases. Theft constituted another major concern. In order to minimize the risk of theft the first statutes of the Ashmolean required that only one group of visitors be admitted at a time and that the doors be closed behind them.²³ The displacement of (more or less) carefully arranged objects by visitors, in turn, was a constant annoyance for curators.

Significantly, the eighteenth-century Ashmolean underkeeper who was accused of being uncivil for hesitating to allow a visitor manual access to the contents of a cabinet was not motivated by a concern over potential damage but by a fear that something might “be lost by that means”. In fact, the underkeeper’s report of the incident was written to explain the loss of an (unidentified) gem which he suspected was pocketed by the eager visitor.

After she had left the Museum I went immediately to adjust the Drawers in which many Things had been displaced by her, but could not find the Gem.²⁴

Though the gem in this case was returned to the museum, one might think that incidents such as this would have put a quick end to hands-on museum tours. Yet as late as 1827 the Ashmolean regulations allowed visitors to handle artefacts with the curator’s permission.²⁵ Apparently tactile access was considered of sufficient importance that it outweighed the risks to the integrity to the collection which it entailed.

It is impossible to know exactly how much early collections were handled by visitors. Museum goers frequently lamented not having enough time to appreciate the collection properly and time constraints would certainly have limited the amount of tactile engagement possible. However, the indications are that touching was commonplace, so commonplace as to customarily escape mention. In his tour of English museums and collections, Von Uffenbach makes note of one place where his sense of touch was restricted rather than those where it was not. That place was the Chapel of St. Edward the Confessor in Westminster Abbey, where various historical and legendary artefacts were kept—coronation chairs and “the famous stone of the Patriarch Jacob” among others. Von Uffenbach wrote that he “should much have liked to scrape off a little” of this famous stone with his knife but “dared not, for one is liable to punishment for even sitting on one of these chairs.”²⁶ A hint of modern museum policy is suggested here, except that the restrictions apparently did not go so far as to forbid all forms of touch for Von Uffenbach records the heaviness of a sword kept in the same chapel.²⁷

Exhibits in museums and collections which were placed out in the open—hanging on walls or arranged on tables—were particularly likely to be touched—but even exhibits in drawers and cases might be taken out and handled. Von Uffenbach describes “a calculus as big as a hen’s egg” in the collection of St John’s College which was considered precious enough to merit “a carefully designed gold casket with a crystal lid”, yet which was taken out of its case for the benefit of visitors.²⁸ The mere fact of an artefact being placed under glass hence did not necessarily signify untouchability. Nor can it be assumed that when visitors to museums recorded “seeing” a collection that “seeing” was all they did. “Then, as now, “to see” could be used in a general sense to mean to encounter or to perceive and could well include various sensory modalities. In a description of a visit to the Tower of London in 1710 Von Uffenbach notes that an attempted robbery had resulted in the crown jewels kept there being less accessible to visitors. The jewels were now displayed behind a “trellis work of strong iron . . . through which strangers can view the things.” He adds, however, that it is still possible “to get one’s hand through and pick up the articles to feel their weight, so that everything can still be seen tolerably. . . .”²⁹ (This was apparently the opinion of other visitors as well. William Hutton, who visited the Tower later in the century, describes putting his hands through the grate and picking up the crown jewels.)³⁰ Even the caged animals in the Tower’s famous menagerie were not out of hand’s reach. The lions kept there, indeed, were said to be “so tame that you can touch them with perfect safety.”³¹ For Von Uffenbach and for others, evidently, a satisfactory viewing involved handling.

Certain objects displayed in museums and collections were interactive by nature. Examples of this noted by Von Uffenbach were the sword kept in the Bodleian Library collection which had “a large knob of crystal, which can be unscrewed and in which is painted a golden hourglass” and a block of wood with a movable brass ring displayed in the collection of the Anatomy School in Oxford: “not only can it be turned completely round, but it shows no sign of the place where it has been soldered.”³² Other objects were enlivened by mechanical devices. One such was the statue of Henry VII which impressed many eighteenth-century visitors to the Tower of London. A visiting Frenchman coyly notes: “If you press a spot on the floor with your feet, you will see something surprising with regard to this figure, but I will say no more. . . .”³³ The “something surprising” may have been related to the figure’s codpiece, described below.

Generally, the most evident role played by the sense of touch in collection settings was that of supplementing vision. A visual impression of the smoothness of a sculpture, for example, could be complemented by a tactile impression of its smoothness. Smaller objects might be handled in order to enable them to be better seen—turned around or held up to the light. When visiting Hans Sloane’s collection in London Von Uffenbach describes holding a shell up to the light so that he could see “the concham lying concealed within it.”³⁴

Touch had an advantage over sight in that it was understood to be the sense of certainty, an association symbolically grounded in the biblical tale of Thomas, who needed to touch the risen Christ to believe in his reality. As Robert Mandrou pointed out in his history of early modern France:

Until the eighteenth century at least, touch remained one of the master senses. It checked and confirmed what sight could only bring to one's notice. It verified perception, giving solidity to the impressions provided by the other senses, which were not as reliable.³⁵

Even in the eye-minded eighteenth-century, when vision was widely lauded as the basis of all intellectual cognition, there were still many who considered touch "to have the best and final access to the world that sense reveals."³⁶ Such assertions are borne out by the use of touch by visitors to early museums. For example, the most remarkable item in the Bodleian collection according to Von Uffenbach was a framed image of a lizard in white marble set in a black marble. He wrote that although this *looked* like a work of nature the eye might be deceived by skilful artifice. Touch, however, provided reliable evidence of the natural origin of the image: "a blind man even though he could not see could yet feel that this is a natural vein (*palpando experiri potest*)."³⁷

The sense of touch not only verified sight, it also provided information not accessible to the eye. Visitors to collections, for example, often lifted objects to ascertain their weight. When describing the collection in the Tower of London Von Uffenbach stressed the importance of being able to pick up the crown jewels and feel their weight. When visiting the Ashmolean Fiennes tested the weight of a cane. In 1646 John Evelyn recorded lifting an antler in a Swiss collection to test its weight ("one branch of them was as much as I could well lift").³⁸ Nor were only inanimate showpieces subjected to this treatment. When Samuel Pepys went to see two oversized children on display at Charing Cross in 1667 he "tried to weigh them in [his] arms."³⁹

The weight of an object might be taken as an indication of the material of its composition, of its value, or of the strength required to wield it. Attempting to ascertain the weight of something by lifting it, however, was not just a matter of data gathering, such as might otherwise and with better accuracy have been accomplished with scales, but of bodily knowledge. A hands-on approach to exhibits enabled visitors to acquire an embodied understanding of the nature of the display.

While anything in a museum might be the subject of a visitor's touch, sculpture in particular seems to have elicited a tactile response. As a French courtier noted in the mid-seventeenth century, people began looking at sculptures by touching them.⁴⁰ In the case of sculpture the sense of touch gave notice that the representations of humans and animals that looked so real were in fact made of hard stone—a sensory contradiction that never lost its power to fascinate.⁴¹ At the same time it allowed people to vicariously handle what they would rarely, if ever, have been able to actually touch—emperors and goddesses and lions. Certainly sculptures, with their life-like forms, might also elicit a sensuous desire for tactile intimacy, as depicted, for example, in the ancient myth of Pygmalion and Galatea. One prominent seventeenth-century collector in Rome, Hippolito Vitellesco, was reputed to embrace and kiss the statues in his collection.⁴² Far from being exceptional, it is likely that many statues were handled this way in the seventeenth and eighteenth centuries.⁴³

Some critics found such tactile interaction with sculpture too coarsely sensuous. The sixteenth-century art theorist Vicenzio Borghini, for example, denounced the practice of touching and kissing statues as vulgar.⁴⁴ In the eighteenth-century Friedrich Schiller claimed that the use of touch for aesthetic appreciation was a mark of savagery.⁴⁵ Others, however, held that sculptures might best be comprehended by the hands. Benedetto Varchi suggested that touch alone could appreciate the artifice involved in a sculpted work.⁴⁶ Referring to a famous ancient statue known as the Hermaphrodite, Lorenzo Ghiberti commented that “there was the greatest refinement, which the eye would not have discovered, had not the hand sought it out.”⁴⁷ In the late eighteenth century Goethe poetically declared that by caressing flesh one comes to understand the tactile value of sculpture: to “see with a feeling eye, feel with a seeing hand.”⁴⁸ The importance of touch for the aesthetic appreciation of sculpture was most notably upheld by the German philosopher Johann Gottfried Herder. Herder, in fact, considered sculpture to be the highest form of art precisely because it was perceptible to the sense of touch. According to the philosopher, touch afforded a more profound appreciation of beauty than sight.⁴⁹ While most museum patrons probably did not attempt to justify their caresses of sculptures by reference to philosophies of aesthetics, their practices could nonetheless be encompassed by contemporary theories of art.⁵⁰

The most damaging form of touch manifested by visitors to collections was that motivated by the desire to possess the object on display, or some part of it, as when Von Uffenbach wished to scrape off a little of “the famous stone of the patriarch Jacob” in Westminster. While this desire no doubt was customarily thwarted by collection owners and curators, it was also the case that items or fragments of items not deemed to be particularly valuable might be given away to visitors as souvenirs or tokens of esteem. The original statutes of the Ashmolean decreed that the Keeper might make presents of redundant museum items “to some Person of extraordinary quality.”⁵¹ When Von Uffenbach visited the collection of historical records in Wakefield Tower in London he asked for and received a torn piece of a letter “of particular antiquity.” (He noted the “fibrous and tough” quality of the paper.)⁵²

If they could not actually possess the objects on exhibit, visitors did often use their senses to attain an intimate engagement with them. We have seen how sculptures often elicited a desire for tactile intimacy, the same might also occur with a wide range of artefacts. The best description of this comes from an account the German traveller Sophie de la Roche wrote of her 1786 visit to the British Museum (established in 1753):

With what sensations one handles a Carthaginian helmet excavated near Capua, household utensils from Herculaneum . . . There are mirrors too, belonging to Roman matrons . . . with one of these mirrors in my hand I looked amongst the urns, thinking meanwhile, ‘Maybe chance has preserved amongst these remains some part of the dust from the fine eyes of a Greek or Roman lady, who so many centuries ago surveyed herself in this mirror . . .’ Nor could I restrain my desire to touch the ashes of an urn on which a female figure was being mourned. I felt it gently, with great feeling . . . I pressed the grain of dust between my fingers tenderly, just as her best friend might once have grasped her hand . . .⁵³

It was over a hundred years since the Ashmolean first opened its doors when this experience was recorded at the British Museum but the indication is that touch still had an important place in museum visits. Of course, many social and sensory developments had occurred during those years of which a more in-depth study of visitor behaviour in early museums would have to take account. Certainly Sophie de la Roche's romantic sensibility would have been foreign to the more scientifically-minded Von Uffenbach. Yet, when a collection contained ancient and exotic artefacts, many seventeenth- and eighteenth-century visitors besides La Roche must have felt a thrill at holding in their hands what long-ago and far-away people had held in their hands. In her visit to the British Museum Sophie de la Roche even imaginatively resurrected a former owner of the artefacts on display in order to establish direct contact with her through her bodily remains. The seeming ability of touch to annihilate time and space gave it a particularly vital role in the museum where so many of the exhibits were from long ago and far away. Touch helped bring the museum to life.

As an intimate sensory contact, however, touch did more than create physical and emotional connections with other peoples and places. It was a way of acquiring social prestige, of touching with one's own hands artefacts and artworks which had passed through a succession of distinguished hands in the past. It was also a means of transferring power. A number of the objects displayed in early museums and collections had religious, royal or mythological associations and seemed to many to be imbued with sacred or magical qualities. The counterpart to the cult of the museum object could be found in the cult of the religious relic, in which devotees frequently touched and kissed relics and icons both as a sign of reverence and as a mode of receiving an influx of sacrality.⁵⁴ Even in Protestant England where the religious veneration of images and relics had been suppressed, the belief that extraordinary objects or persons could be sources of vital energy lived on in popular culture and in some cases in official practice. During the seventeenth and early eighteenth-century, for example, monarchs still practiced healing by touch in England.⁵⁵ Thus when Hans Sloane is depicted in an eighteenth-century poem as impressing visitors to his collection with "a sacred pin, that touched the ruff that touched Queen Bess's chin,"⁵⁶ the intended satire must be understood within a cultural context in which the touch of a monarch, or of something which had been touched by a monarch, could have transformative effects. In fact, in the eighteenth century the velvet lining of Henry VIII's codpiece, kept in the collection of the Tower of London, was stuck full of pins which were given away to visitors as fertility charms.⁵⁷

Even if no wonder-working effects were expected, coming into close contact with royalty exercised a powerful attraction for collection visitors. When Samuel Pepys toured Westminster Abbey in 1669, he was allowed to touch the corpse of Queen Katherine, wife of Henry V, which was kept in a chest. "[I] had the upper part of her body in my hands. And I did kiss her mouth, reflecting upon it that I did kiss a Queen and that this was my birthday."⁵⁸ It was obviously a meaningful moment for Pepys.

The quasi-magical nature of certain collections was due not only to the extraordinary objects they contained—royal relics, Egyptian mummies, unicorns' horns—but also to their role as microcosms, bringing together and ordering a world of natural and artificial objects. The seventeenth-century Tradescant col-

lection of curiosities, which would form the nucleus of the Ashmolean collection, was memorialized on the Tradescant tombstone as “a world of wonders in one closet shut.” It was also known as the Ark in reference to Noah’s Ark which preserved the world in miniature during the Biblical flood.⁵⁹ Surveying and manipulating the objects in this microcosm, either as owner, curator or visitor, made one god-like, a master of the universe with the world in one’s hands.

I have thus far concentrated on the role of touch in seventeenth and eighteenth-century collections because, after sight, it is to this sense that one finds the most references in contemporary accounts.⁶⁰ Yet the other senses were by no means left behind at the museum door. In terms of hearing, this sense’s most important role was that of attending to the accounts given by collection owners and guides. Indeed, whether visitors found the patter of their guides informative or tedious, it was a virtually unavoidable accompaniment to collection visits during this period. Hearing was also used to listen to those exhibits that made sounds, which could include natural objects, such as the petrified egg with a rattling yolk which John Evelyn describes,⁶¹ or artefacts, such as automata which played music or talked.⁶² Musical instruments in particular required sounding out to be fully appreciated. When visiting the large collection of Claudius de Puy in London Von Uffenbach describes the “most agreeable sound” produced by “an elegant Indian organ.”⁶³ Indeed the notion of a collection of musical instruments which were never heard—a common enough situation in modern museums—would probably have seemed bizarre in Von Uffenbach’s day.

The sense of smell is usually mentioned by collection visitors with regard to scented woods or strong-smelling animals on exhibit.⁶⁴ Even when not recorded by visitors, the odours of artefacts would often have been perceived when the pieces were handled. Ambient odours also played a role in the collection experience. Coal smoke and soot were a characteristic feature of early English collections due to the pervasive burning of coal for heating. A musty odour of decay must also have been common in many museums, such as the Ashmolean, which included many disintegrating animal remains.⁶⁵

Generally, smell had more powerful symbolic associations and a larger ritual role in early modernity than it would have in later times.⁶⁶ Anthony Wood records, for example, that during the entry of James II into Oxford in 1687, eight women clad in white strewed fragrant herbs before the king’s retinue “which made a verie great smell in all the street, continuing so all that night till the raine came . . .”⁶⁷ Odour was understood to be a sign of an object’s or person’s intrinsic “virtues” or traits. As shall be described below, this gave smell a chemical, as well as a symbolic importance.

One might presume that, as multisensory as the collection experience might have been for early moderns, the sense of taste, at least, would have been excluded from that experience. However, while it is true that visitors to collections did not customarily go around tasting the exhibits, their visit still might be informed by gustatory associations. Just as occurs today, museum visits might be coupled with meals. In early public museums, however, visitors sometimes brought food to eat within the collection space itself.⁶⁸ In private collections, the owner, if so inclined, might provide a collation. Hans Sloane customarily ended his guided tour of his collection with coffee in the library.⁶⁹ For those who wished for more meal and less museum, there was Don Saltero’s coffee house,

established by Sloane's former servant and embellished with a range of curious objects, many of them cast-offs from Sloane's museum.⁷⁰

Not only might meals be taken within a museum, the museum itself might be conceptualized as a meal. When the Prince and Princess of Wales visited Sloane's museum in 1748, exhibits were set up on and removed from tables like the courses of a meal. The first course was precious stones as found in nature. "[T]he same tables were covered for a second course with all sorts of *jewels*, polish'd and set after the modern fashion, or with *gems*, carv'd or engraved . . ." The third course consisted of gold and silver ornaments from around the world.⁷¹

Though not a standard part of a museum visit, the most direct involvement of taste in the museum occurred when collectibles were themselves eaten or sampled. Von Uffenbach, for example, records the following experience when visiting Sloane's collection:

Among other things he pointed out to us the nests that are eaten as a delicacy. It is said that the material is formed in the sea like the succino and used by the birds to build their nests. But, judging from its taste, appearance and feeling, I took it for a gum or resin. . . .⁷²

Von Uffenbach uses his sense of taste here as an instrument of investigation which supplements sight and touch. Although he doesn't make a point of it, by tasting the birds' nests he also creates a bond with the Asian peoples who eat the nests: "the nests that are eaten" become "the nests I have eaten."

In fact, certain foods which had recently been introduced to England and would later become commonplace items were still considered exotic enough in the eighteenth-century to be interesting museum pieces. (It was the rare and curious which were generally prized by museum collectors and visitors, rather than common specimens which might also be found in comprehensive collections.) Sloane, for example, possessed a branch of the coffee tree with its leaves and berries in his collection, the viewing of which would have provided an appropriate prelude for the subsequent partaking of coffee in the library with which favoured guests were honoured. (Sloane was also interested in the cacao bush of Central America, and even marketed his own brand of chocolate as a restorative for invalids.)⁷³

In the case of exotic animals, many of them had been eaten by hungry sailors before their skins or shells arrived at a museum.⁷⁴ Others were imported for medicinal use. Indeed, their presumed medicinal effect was a common reason for ingesting the kinds of rarities exhibited in museums. Characteristic museum pieces which were also items in contemporary pharmacopoeia included not just specimens of plants and animals, however, but also such things as mummy flesh and even fossils and stone axes—which would be taken in powdered form.⁷⁵ The rare and wondrous qualities that made an object a likely museum piece might also make it strong medicine.

While public museums such as the Ashmolean were presumably safeguarded from such gustatory appropriation by visitors there no doubt were many private collectors who literally ate their museums, or at least part of them. Aside from its medicinal, gastronomic or scientific value, eating a museum piece was, perhaps, the ultimate act of ownership. Even museum visitors who were unable to eat the

particular “unicorns’ horns” or Egyptian mummies on display, might have partaken of them in the past through their local apothecary.⁷⁶ Indeed the apothecary’s shop itself often resembled a museum with its exotic *materia medica*.⁷⁷ Early collections, consequently, might provide a “feast” for more than just the eyes.

It is notable how many of the founders and curators of early museums, at least in England, were men of science. Hans Sloane, for example, was a physician and naturalist, while Elias Ashmole, founder of the Ashmolean, was an ardent student of botany and chemistry.⁷⁸ Many visitors to museums, such as Evelyn and Von Uffenbach, were also keenly interested in scientific matters. The strong association between science and museology served to reinforce the use of multiple senses when interacting with museum pieces. For all its fascination with optic glasses, seventeenth and eighteenth-century science, or natural philosophy, still emphasized the importance of multi-sensorial investigation for understanding the nature of the objects under study. Indeed, whereas today sight would be considered a more serious way of comprehending museum pieces than touch or smell, in the seventeenth century sight might have been deemed the more superficial or frivolous form of apprehension. Thus Robert Hooke, curator of the Royal Society’s museum or “Repository” stated that the ocular inspection of objects needed to be accompanied by the “manual handling . . . of the very things themselves.”⁷⁹ He also warned that:

The use of such a collection is not for divertisement and wonder, and gazing . . . like pictures for children to admire and be pleased with, but for the most serious and diligent study of the most able and proficient in natural philosophy.⁸⁰

For Hooke such diligent study included noting such qualities as

Sonorousness or Dulness. Smell or Taste. Heat, or Cold . . . Gravity, or Levity. Coarseness, or Fineness. Fastness, or Looseness. Stiffness, or Pliableness. Roughness, or Brittleness. Claminess, or Slipperiness.⁸¹

The fellows of the Royal Society took such recommendations to heart. The physician and botanist Nehemiah Grew, for example, tasted many items he catalogued in the Society’s museum. Experiments undertaken at the Royal Society might also involve multisensory inquiry. The report of a 1679 experiment on hartshorn which had been softened by boiling noted that the result “smelt, tasted and felt” like “old cheddar or Parmesan cheese.”⁸² In 1681 Evelyn recorded being present at an experiment on phosphorus at the Royal Society, part of which involved dissolving phosphorus in ale. “Of this I drank,” wrote Evelyn, “& [it] seem’d to me to be of an agreeable amber scent, with very little altering the tast of the Ale.”⁸³

While prominent in its promotion of empirical philosophy, the Royal Society was by no means unique in its sensory methodology. When Von Uffenbach felt and tasted his way through collections he was employing current scientific methodology. So was Robert Plot, who would become the first Keeper of the Ashmolean, when he classified the echoes produced by Oxfordshire colleges and caves or noted the odours of fossils.⁸⁴

Here then we have a wide, though perhaps not comprehensive, range of reasons for why visitors to early museums and collections found it “meaningful and

necessary”—in Elias’s words—to engage with exhibits using more than their eyes. The particular reasons in any case would depend on the interests and background of the visitor. Celia Fiennes would seem to have been motivated primarily by general curiosity in her sensory explorations, Zacharias Von Uffenbach by scientific interest and Sophie de la Roche by a desire to establish an intimate connection with the artefacts’ original owners. It was no doubt often the case that the interactions of a visitor were prompted by different motives, or a combination of motives, depending on the particular piece—a sculpture might receive an aesthetic touch, an exotic shell a scholarly touch, and a religious icon a devotional touch. Some of these reasons for interacting with museum pieces would lose relevance in modernity, others which survived would be repressed or redirected within a museum context due to the rise of new paradigms of perception and of appropriate museum use.

Significantly, divisions among the fields of aesthetics, science and religion were not as clearly marked in the period under consideration as they would come to be in late modernity. In private and public collections, objets d’art often mingled with botanical and zoological specimens and historical and ethnographic artefacts. (Indeed, natural objects which looked as though they had been crafted by hand, such as the marble lizard mentioned above, were favourite museum pieces.) Even in the “New Philosophy” with its emphasis on empirical observation, adhered to by many of the key figures in the development of the early modern museum, the mythical and the magical often mingled with the natural and the historical. Hans Sloane upheld the efficacy of a number of wonder-working remedies in his medical practice which would later be dismissed as superstitious. Elias Ashmole had an abiding interest in astrology and occultism. Robert Plot was an alchemist. This characteristically premodern mingling of spheres of knowledge was accompanied by a multisensory understanding of the cosmos according to which crucial information was transmitted and discernible through all sensory channels.⁸⁵ If the museum was a little cosmos then it too could be regarded as constituting a multisensory tapestry of colours, textures, sounds and smells.

Soon, however, the scientific world view—and the museum—would become much less sensuous in nature. Due to technological developments as well as to changes in scientific practice and theory, the nineteenth-century scientist was expected to gather information by means of microscopes and measuring devices and not by sniffing or tasting the material under study. Indeed, the non-visual senses would be given little role to play in modern scientific inquiry.⁸⁶ By the end of the nineteenth-century, in fact, the use of the proximity senses of smell, taste and touch, had been generally relegated to the realm of the nursery and the “savage.” Civilized adults were deemed to comprehend the world primarily through sight and secondarily through hearing.⁸⁷

As regards the museum, this sensory shift meant that allowing visitors close contact with museum pieces could no longer be justified by scientific values. The important thing in modernity was to *see*. All that a modern museum-goer could reasonably expect, therefore, was to have a clear, well-lit view of the objects on display. This move away from physical interaction with museum pieces coincided with the increasing nineteenth-century concern for conservation. As the number of visitors to museums grew so did the risk of damage to the collec-

tions. A hands off policy, hence, came to be regarded by curators as a practical necessity.⁸⁸

Sociological factors also played a role in this sensory transition. In the world of the museum, just as in the real world, not everyone was considered equal. On his first visit to the Ashmolean Von Uffenbach was dismayed to find the museum full of “country folk” who “impetuously handle[d] everything.”⁸⁹ What was the meaning of this “impetuous handling” by “country folk,” people who left no records of their museum visits? Perhaps a combination of manual exploration, tactile *frisson*, vicarious possession and communal participation—reminiscent of the tradition of taking food by the hand from a common pot. To Von Uffenbach—and to the custodians—it evidently signified a lack of order. Von Uffenbach was not against handling exhibits as such, as we know from his own manual explorations of museum pieces, he was opposed to what he saw as the rough, untutored handling of the uncultured masses. There were definite class distinctions of touch in the museum, and gender distinctions as well. Von Uffenbach reserved his greatest scorn for lower-class women who visited museums. In the case of the Ashmolean he noted with disgust that “even the women are allowed up here for sixpence; they run here and there, grabbing at everything and taking no rebuff from the *Sub-Custos*.”⁹⁰

While I will not explore the implications of such class and gender divisions in the museum in the present essay it is clear from contemporary accounts that the sensory impressions gathered by the (male) connoisseur and scholar were understood to be on a different plane from those of the common visitor. As museums became more open to and frequented by the general public in the late eighteenth and nineteenth centuries not only was there an increased danger of damage to artefacts from handling there was also an increased sense—manifested in the quote by Anna Jameson above—that the “vulgar” touch of the common visitor profaned the exhibits, and implicitly the social elite who acquired collections and supported museums.

Indeed, it may have been as much the desire of the elite to prevent the lower classes from showing disrespect towards the cultural and political authority museum pieces were seen to represent, as the modern emphasis on conservation and the development of more visually-oriented models of science and aesthetics, that resulted in the non-visual senses being almost entirely shut out of the museum by the mid-nineteenth century. After all, a characteristic act of revolution is the toppling of statues, as had been dramatically illustrated during the French Revolution. Louis-Sebastian Mercier described visiting a post-Revolutionary museum of toppled monuments in Paris in 1797:

I walked on tombs, I strode on mausoleums. Every rank and costume lay beneath my feet. I spared the face and bosoms of queens. Lowered from their pedestals, the grandest personages were brought down to my level; I could touch their brows, their mouths. . . .⁹¹

Perhaps due to scenes such as this, the fear that museums might be a target of working-class rage seemed ever-present in the minds of nineteenth-century administrators in England.⁹² No wonder one mid-nineteenth-century official wrote with satisfaction of the workers in the National Gallery of London that one could see them “sitting wondering and marvelling over those fine works,

and having no other feeling but that of pleasure or astonishment, they have no notion of destroying them.”⁹³ This sounds remarkably like Robert Hookes’ description of gawking children pleased with pictures but now the tone is complacent rather than contemptuous. Certainly there is no sign of the “impetuous handling” observed by Von Uffenbach in the Ashmolean or by Anna Jameson in the art galleries of her youth.

Whatever the reasons for this sensory shift, investigating how people have behaved in museums, how they have perceived and interacted with the exhibits, not only furthers our understanding of the development of the museum, it also offers an excellent example of how the sensory values of a particular time and place attained practical expression within a key cultural site.

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ENDNOTES

Part of the research on which this essay is based was made possible by grants from Social Sciences and Humanities Research Council of Canada and the CUPFA Professional Development Fund.

1. H.M. Bateman, *The Boy Who Breathed on the Glass in the British Museum* (London, 1976).
2. The role of touch in the contemporary museum, particularly as regards the visually impaired, is discussed in Fiona Candlin, “Don’t Touch! Hands Off! Art, Blindness and the Conservation of Expertise,” *Body & Society* 10 (2004): 71–90.
3. The subject of visitor response to museums has been treated by a number of scholars and administrators, but rarely as regards sensory response. See Lynne Teather, “Museology and Its Traditions: The British Empire, 1845–1945,” (Ph.D. Dissertation, University of Leicester, 1984), ch. 9; Kenneth Hudson, *A Social History of Museums: What the Visitors Thought* (London, 1975).
4. Pierre Jean Grosley, *A Tour to London*, T. Nugent, trans. (London, 1772).
5. Norbert Elias, *The Civilizing Process: The History of Manners and State Formation and Civilization*, E. Jephcott, trans. (Oxford: Blackwell, 1994), p. 52.
6. Shane Leslie, *Men Were Different: Five Studies in Late Victorian Biography* (Freeport, NY, 1967), p. 94.
7. Sarah Womack, “Salad Days Over for Dinner Table,” *National Post*, 10 June 2005.
8. See, for example, Arjun Appadurai, ed., *The Social Life of Things: Commodities in Cultural Perspective* (Cambridge, 1986); Tim Dant, *Material Culture in the Social World* (Buckingham, 1999); Lorraine Dixon, ed., *Things That Talk: Object Lessons from Art and Science* (New York, 2004).

9. Works dealing with the cultural history of the senses include Alain Corbin, *The Foul and the Fragrant: Odor and the French Social Imagination*, M. Kochan, R. Porter, and C. Prendergast, trans. (Cambridge, MA, 1986); Constance Classen, *Worlds of Sense: Exploring the Senses in History and Across Cultures* (London, 1993); Peter Charles Hoffer, *Sensory Worlds in Early America* (Baltimore, MD, 2003); David Howes, ed., *Empire of the Senses: The Sensual Culture Reader* (Oxford, 2004); Mark M. Smith, *How Race is Made: Slavery, Segregation and the Senses* (Chapel Hill, 2006).
10. How characteristic the comportment of visitors to English museums was of visitors to European museums in general is a subject for future research. I have thus far found no reason to believe there were major differences.
11. On the early history of museums see Oliver Impey and Arthur MacGregor, eds., *The Origins of Museums: The Cabinet of Curiosities in Sixteenth and Seventeenth Century Europe* (Oxford, 1985).
12. Celia Fiennes, *The Journeys of Celia Fiennes* (London, 1949), p. 33.
13. Zacharias Conrad von Uffenbach, *Oxford in 1710*, W.H. Quarrell and W.J.C. Quarell, eds. and trans. (Oxford, 1928), p. 26.
14. Cited by Frank Herrmann, ed., *The English as Collectors* (London, 1972), p. 126.
15. Elias, *The Civilizing Process*, p. 55.
16. Mark Girouard, *Life in the English Country House* (New Haven, CT, 1978), pp. 100–101.
17. Fiennes, *Journeys*, pp. 33–37.
18. Fiennes, *Journeys*, pp. 34–35.
19. Cited in R.F. Ovenell, *The Ashmolean Museum* (Oxford, 1986), p. 147.
20. Ovenell, *Ashmolean Museum*, p. 147.
21. Cited in Martin Welch, “The Ashmolean as Described by its Earliest Visitors,” in Arthur MacGregor, ed., *Tradescant’s Rarities* (Oxford, 1983), p. 68; see also Uffenbach, *Oxford in 1710*, p. 24.
22. Paul Fréart de Chantelou, *Diary of Cavaliere Bernini’s Visit to France*, A. Blunt and G.C. Bauer, eds., M. Corbett, trans. (Princeton, NJ, 1985), p. 185.
23. Ovenell, *Ashmolean Museum*, p. 50.
24. Ovenell, *Ashmolean Museum*, pp. 147–148.
25. Ovenell, *Ashmolean Museum*, p. 197.
26. Zacharias Conrad von Uffenbach, *London in 1710*, W.H. Quarrell and M. Mare, trans. (London, 1934), p. 92.
27. Von Uffenbach, *London in 1710*, p. 93.
28. Von Uffenbach, *Oxford in 1710*, p. 58.

29. Von Uffenbach, *London in 1710*, p. 40.
30. William Hutton, *A Journey to London*, 2nd ed. (London, 1818), pp. 124–125.
31. Frederick Kielmansegge, *Diary of a Journey to England in the Years 1761–1762*, Countess Kielmansegg [sic], trans. (London, 1902), p. 182.
32. Von Uffenbach, *Oxford in 1710*, pp. 13, 23.
33. César de Saussure, *A Foreign View of England in the Reigns of George I and George II*, Madame von Muyden, trans. (London, 1952), p. 88.
34. Von Uffenbach, *London in 1710*, p. 186.
35. Robert Mandrou, *Introduction to Modern France: An Essay in Historical Psychology*, R.E. Hallmark, trans. (New York, 1976), p. 53.
36. David Summers, *The Judgement of Sense: Renaissance Naturalism and the Rise of Aesthetics* (Cambridge, 1987), p. 326.
37. Von Uffenbach, *Oxford in 1710*, p. 13.
38. John Evelyn, *The Diary of John Evelyn*, E.S. de Beer, ed. (Oxford, 1955), vol. II, p. 516.
39. Samuel Pepys, *The Diary of Samuel Pepys*, R. Latham and W. Matthews, eds. (Berkeley, 1976), vol. VIII, p. 326.
40. Chantelou, *Diary*, p. 185.
41. See, for example, Francis Haskell and Nicholas Penny, *Taste and the Antique: The Lure of Classical Sculpture, 1500–1900* (New Haven, CT, 1981), pp. 163, 235.
42. Evelyn, *Diary*, p. 283.
43. The intimate contacts which took place between gallery-goers and sculptures in eighteenth-century France are depicted in the work of the contemporary artist Gabriel de St. Aubin. See Susan Stewart, “Prologue: From the Museum of Touch” in *Material Memories*, Marius Kwint, Christopher Breward and Jeremy Aynsley, eds. (Oxford, 1999): 29–30.
44. Geraldine A. Johnson. “Touch, Tactility, and the Reception of Sculpture in Early Modern Italy” in *A Companion to Art Theory*, P. Smith and C. Wilde, eds. (Oxford, 2002), p. 66.
45. Friedrich Schiller, *On the Aesthetics and Education of Man*, E.M. Wilkinson and L.A. Willoughby, eds. and trans. (Oxford, 1982), p. 195.
46. Jodi Cranston, “The Touch of the Blind Man: The Phenomenology of Vividness in Italian Renaissance Art,” in *Sensible Flesh: On Touch in Early Modern Culture*, E.D. Harvey, ed. (Philadelphia, 2003): 238–239.
47. Johnson, “Touch,” p. 64.

48. Johann Wolfgang von Goethe, *Roman Elegies and Venetian Epigrams*, L.R. Lind, trans. (Wichita, KS, 1974), p. 45.
49. Johann Gottfried Herder, *Sculpture: Some Observations in Shape and Form from Pygmalion's Creative Dream*, J. Gaiger, ed. and trans. (Chicago, 2002); Robert E. Norton, *Herder's Aesthetics and the European Enlightenment* (Ithaca, NY, 1990), ch. 6
50. For a discussion of this issue, weighted on the side of anti-tactility, see James Hall, *The World as Sculpture: The Changing Status of Sculpture from the Renaissance to the Present Day* (London, 1999), ch. 4. Hall refers to many informative sources in his work.
51. Ovenell, *Ashmolean Museum*, p. 50.
52. Von Uffenbach, *London in 1710*, p. 69.
53. Sophie de La Roche, *Sophie in London*, C. Williams, trans. (London, 1933), pp. 107–108.
54. See, for example, Christopher Nyrop, *The Kiss & Its History*, W.F. Harvey, trans. (London, 1901), p. 155.
55. See Keith Thomas, "Magical Healing: The King's Touch," in *The Book of Touch*, Constance Classen, ed. (Oxford, 2005): 354–362.
56. Cited in Gavin R. De Beer, *Sir Hans Sloane and the British Museum* (London, 1953), p. 125
57. Von Uffenbach, *London in 1710*, p. 41; see also Richard D. Altick, *The Shows of London* (Cambridge, MA, 1978), p. 88.
58. Pepys, *Diary*, vol. IX, p. 457.
59. Mea Allan, *The Tradescants: Their Plants, Gardens and Museum, 1570–1662* (London, 1964); MacGregor, *Tradescant's Rarities*.
60. On the social history of the sense of touch see Constance Classen, ed., *The Book of Touch* (Oxford, 2005).
61. Evelyn, *Diary*, vol. II, p. 471
62. see Altick, *Shows of London*, ch. 3.
63. Von Uffenbach, *London in 1710*, p. 83.
64. For example, Evelyn, *Diary*, vol. II, p. 502; Altick, *Shows of London*, pp. 88, 89.
65. In 1755 a number of damaged or decayed specimens had to be removed from the Ashmolean. Welch, "The Ashmolean as Described by its Earliest Visitors," p. 68.
66. See Constance Classen, David Howes, and Anthony Synnott, *Aroma: The Cultural History of Smell* (London, 1993).
67. Anthony à Wood, *The Life and Times of Anthony à Wood*, L. Powys, ed. (London, 1961), p. 257.

68. See, for example, Michael Levy, *A Brief History of the National Gallery* (London, 1970), p. 8
69. Von Uffenbach, *London in 1710*, p. 187. When the composer George Frederic Handel visited Sloane in 1740 he carelessly placed his buttered muffin on a precious manuscript, incurring the anger of his host. See Edward Miller, *That Noble Cabinet: A History of the British Museum* (Athens, OH, 1974), pp. 38–9.
70. Miller, *That Noble Cabinet*, p. 26.
71. The account of this visit can be found in Hudson, *Social History of Museums*, pp. 19–20. Overlooking the symbolism of this carefully prepared royal feast, De Beer sees it as a sign that Sloane's collection had outgrown its space so that not everything could be exhibited at once. De Beer, *Sir Hans Sloane*, p. 133.
72. Von Uffenbach, *London in 1710*, p. 187.
73. De Beer, *Sir Hans Sloane*, pp. 43, 72–73, 98, 110
74. “[B]oth land and sea turtles were delicacies and many of them ended up in the pot and their carapaces in museums . . . Iguana skins and crocodile heads were often survivors of meals.” Wilma George, “Alive or Dead: Zoological Collections in the Seventeenth Century,” in *The Origins of Museums: The Cabinet of Curiosities in Sixteenth and Seventeenth Century Europe*, Oliver Impey and Arthur MacGregor, eds. (Oxford, 1985), p. 184.
75. David Murray, *Museums: Their History and Use* (Glasgow, 1904), vol. 1, pp. 40, 50, 73; Ken Arnold, “Skulls, Mummies and Unicorns’ Horns: Medicinal Chemistry in Early English Museums,” in *Enlightening the British: Knowledge, Discovery and the Museum in the Eighteenth Century*, R.G.W. Anderson, M.L. Caygill, A. MacGegor and L. Syson, eds. (London, 2003).
76. Edward Brown records drinking out of a unicorn’s horn kept in a Dutch collection in *An Account of Several Travels through a Great Part of Germany* (London, 1671), p. 19.
77. Even Shakespeare’s impoverished apothecary in *Romeo and Juliet* had “in his needy shop a tortoise hung/ An alligator stuff’d and other skins/ Of ill-shaped fishes.” Act 5, scene 1, lines 42–44.
78. See further Arnold, “Skulls, Mummies and Unicorns’ Horns.”
79. Robert Hooke, *The Posthumous Works of Robert Hooke*, R. Waller, ed. (London, 1971), p. 335. For a history of the Royal Society’s Repository, which was one of the tourist attractions of seventeenth- and eighteenth-century London, see Michael Hunter, *Establishing the New Science: The Experience of the Early Royal Society* (Woodbridge, Suffolk, 1989), ch. 4.
80. Cited in De Beer, *Sir Hans Sloane*, pp. 109–10.
81. Hooke, *Works*, p. 36.
82. Thomas Birch, *The History of the Royal Society of London . . .* (London, A. Millar, 1756), vol. III, pp. 486, 489. A number of similar experiments are also recorded in this work. See also Evelyn, *Diary*, vol. IV, p. 278.

83. Evelyn, *Diary*, vol. IV, p. 252. Arnold provides an excellent overview of the multi-sensory practices of the New Philosophers in "Skulls, Mummies and Unicorns' Horns," which led me to several of the citations above.
84. Robert Plot, *The Natural History of Oxford-shire* (London, 1677), pp. 7–16, 93–94.
85. See Constance Classen *The Color of Angels: Cosmology, Gender and the Aesthetic Imagination* (New York, 1998).
86. Von Uffenbach, *Oxford in 1710*, pp. 24, 31.
87. For a history of the marginalization of sensuous experimentation see Lissa Roberts, "The Death of the Sensuous Chemist," in *Empire of the Senses: The Sensual Culture Reader*, David Howes, ed. (Oxford, 2005): 106–127.
88. See Constance Classen, "The Senses," in *Encyclopedia of European Social History from 1300 to 2000*, Peter Stearns, ed. (New York, 2001): 355–364.
89. Von Uffenbach, *Oxford in 1710*, p. 31
90. See Constance Classen, "Touch in the Museum," in *The Book of Touch*, Constance Classen, ed. (Oxford, 2005): 275–286, pp. 282–284 for a discussion of various factors which contributed to the rise in importance of sight and the decline of the non-visual senses in the museum experience.
91. Cited in Hall, *Sculpture*, 101. For a vivid description of the destruction of religious objects and monuments in revolutionary France see Louis-Sebastian Mercier, *The Picture of Paris Before & After the Revolution*, W. and E. Jackson, trans. (London, 1929), pp. 225–229.
92. See Miller, *That Noble Cabinet*, ch.7; Tony Bennett, *The Birth of the Museum: History, Theory, Politics* (London, 1995), ch. 2; Jeffrey A. Auerbach, *The Great Exhibition of 1851* (New Haven, CT, 1999), pp. 128–9.
93. Cited in Teather, "Museology and Its Traditions," p. 4. Compare this scene with the public disorder and sensory confusion which reputedly reigned in the early years of the Gallery: "Not only were the pictures crowded on the walls, but the crowding of visitors (who often were merely sheltering from the rain), their consumption of food, the general smell and the influx of smoky air, all contributed to make a zoo of the Gallery." Levy, *Brief History of the National Gallery*, p. 8.